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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,426	12/28/2001	Sang Chul Yoon	P21845.P06	4378

7055 7590 07/25/2005

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RESTON, VA 20191

EXAMINER
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CHEA, PHILIP J

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/028,426

Applicant(s)

YOON ET AL.

Examiner

Philip J. Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
- 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/21/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

This Office Action is in response to an Amendment filed May 2, 2005. Claims 1-11 are currently pending. Any rejection not set forth below has been overcome by the current Amendment.

#### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### *Information Disclosure Statement*

2. The information disclosure statement (IDS) submitted on January 21, 2005 was filed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7,9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. (US 6,182,094), and further in view of Saito et al. (US 6,523,696).

As per claim 1, Humpleman et al. disclose a home appliance control system, as claimed, comprising:

- an external Internet network installed outside of a building (see Humpleman et al. column 20, lines 42-51, where outside of a building is considered outside the users home);

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- an internal Internet network installed inside the building and connected to said external Internet network via networking equipment (see Humpleman et al. column 20, lines 42-51, where internal network is considered the users home network);
- a plurality of home appliances installed in the building (see Humpleman et al. Fig. 7);
- a computing device that sets private Internet protocol (IP) addresses of said home appliances such that said appliances are connected to said internal network based on the set private IP addresses (see Humpleman et al. column 11, lines 35-47, where the computing device is considered the DHCP server generating a unique IP address to associated with the home device); and
- a plurality of communication modules installed respectively in said home appliances, each of said communication modules corresponding to one of said home appliances and storing the private IP address of the corresponding one of said home appliances, set by said computing device (see Humpleman et al. column 11, lines 35-47, where sending the IP address to the home device implies there is storage in the home device to retrieve the IP address), and processing data transmitted and received between said internal network and said corresponding home appliance to standards of said internal network and said corresponding home appliance (see Humpleman et al. column 7, lines 25-35).

Although the system disclosed by Humpleman et al. shows substantial features of the claimed invention (discussed above), it fails to disclose a computing device that sets port numbers and appliances connected to internal network based on port numbers as well as a communication module storing the port number of the corresponding home appliance.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Humpleman et al., as evidenced by Saito et al.

In an analogous art, Saito et al. disclose a home appliance control system with a computer device that sets IP addresses and port numbers (see column 24, lines 41-53) also showing appliances connected to an internal network based on IP addresses and port numbers (see column 24, lines 41-53)

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as well as a communication module storing the IP addresses and port numbers (see column 24, lines 54-67 and column 25, lines 1-3).

Given the teaching of Saito et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Humpleman et al. by assigning port numbers to home appliances, such as disclosed by Saito, in order to communicate to a correct device if a single IP address is used as an access point.

As per claim 2, Humpleman et al. further disclose a public IP address that enables access from said external Internet network (see Humpleman et al. column 20, lines 32-51).

As per claim 3, Humpleman et al. in view of Saito et al. further disclose that each of the communication modules include:

- a data storage unit that stores the set private IP address (see Humpleman et al. column 11, lines 35-47, where sending the IP address to the home device implies there is storage in the home device to retrieve the IP address) and port number (see Saito column 24, lines 54-67 and column 25, lines 1-3 for storing port number) of said corresponding home appliance;
- an interface storage unit for storing a user interface appropriate to a control and state observation of said corresponding home appliance having said private IP address (see Humpleman et al. column 7, lines 4-12) and port number (as taught by Saito above) stored in said data storage unit;
- and a data processor that converts and processes data transmitted and received between said internal network and a main controller of said corresponding home appliance appropriately to standards of said internal network and main controller (see Humpleman et al. column 7, lines 25-35).

As per claim 4, Humpleman et al. in view of Saito et al. further disclose that said interface stored is configured to be sent to said computing device such that a user controls said corresponding home appliance through said computing device (see Humpleman et al. column 7, lines 45-62).

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As per claim 5, Humpleman et al. in view of Saito et al. further disclose that user interface includes a Java program executable in said computing device (see Humpleman et al. column 7, lines 4-23).

As per claim 6, Humpleman et al. in view of Saito et al. further disclose that the user interface includes a Java program executable in a personal computer of a user when the user gains access to said computing device through said external Internet network (see Humpleman et al. column 20, lines 42-51, where the Java program is still present in the interface as in claim 5).

As per claim 7, Humpleman et al. in view of Saito et al. disclose a method for controlling home appliances, comprising :

- installing a plurality of communication modules in the home appliances, each of the communication modules storing a set private IP address and port number (as taught by Saito above) of a corresponding one of the home appliances and processing data transmitted and received between an internal network of a building in which the home appliances are installed and the corresponding home appliance to standards of the internal network and the corresponding home appliance (see Humpleman et al. column 11, lines 35-47, where sending the IP address to the home device implies there is storage in the home device to retrieve the IP address);
- setting the private IP addresses and port numbers (as taught by Saito above) of the home appliances with a control device, (see Humpleman et al. column 11, lines 35-47);  
and
- controlling each of the home appliances with the set private IP addresses and port numbers (as taught by Saito above) through a user interface (see Humpleman et al. column 14, lines 40-46).

As per claim 9, Humpleman et al. in view of Saito et al. further disclose

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- connecting the home appliances to the internal network if the private IP addresses and port numbers (as taught by Saito above) of the home appliances are set (see Humpleman et al. column 11, lines 13-24); and
- determining whether the home appliances have been connected to the internal network (see Humpleman et al. column 11, lines 56-65).

As per claim 10, Humpleman et al. in view of Saito et al. further disclose storing the user interface appropriate to the appliance control in each of the home appliances and sending the storing user interface to a user desiring the appliance control, such that the user interface is executed by the user (see Humpleman et al. column 7, lines 4-12).

As per claim 11, Humpleman et al. in view of Saito et al. further disclose

- determining whether a private IP address and port number (as taught by Saito above) in a home appliance inputted through the user interface corresponds to the set of private IP address and port number (as taught by Saito above) of each of the home appliances (see Humpleman et al. columns 7 and 8, lines 63-67 and 1-4 and column 12, lines 12-21, where IP addresses are updated in the device list, ensuring the IP address is correct);
- transferring a user's control command inputted through the user interface to a specific home appliance when the private IP address and port number (as taught by Saito above) of the control information corresponds to the set private IP address of the specific home appliance (see Humpleman et al. columns 7 and 8, lines 53-67 and 1-4); and
- controlling only the specific home appliance in response to the transferred control command (see Humpleman et al. column 5, lines 19, where appliance is considered the server and control command comes from client).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Humpleman et al. in view of Saito et al. as applied to claim 7 above, and further in view of Abrams et al. (US 6,587,739).

Although the system disclosed by Humpleman et al. in view of Saito et al. shows substantial features of the claimed invention (discussed above), it fails to disclose, determining whether a user has a

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code valid to control a specific home appliance when the user desires to gain access to control the specific home appliance.

Nonetheless, these features are well known in the art and would have been an obvious modification of the system disclosed by Humpleman et al. in view of Saito et al., as evidenced by Abrams et al.

In an analogous art, Abrams et al. disclose controlling home appliances from a remote location where a user password is required to gain access to certain appliances (see column 11, lines 30-47).

Given the teaching of Abrams et al., a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Humpleman et al. in view of Saito et al. by controlling access to an appliance by using a password, such as disclosed by Abrams et al., in order to regulate the use of certain appliances (see Abrams et al. column 11, lines 39-47).

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



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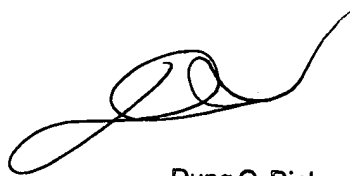
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Chea whose telephone number is 571-272-3951. The examiner can normally be reached on M-F 7:00-4:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip J Chea  
Examiner  
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PJC 7/13/05

A handwritten signature in black ink, appearing to read 'Dung C. Dinh', with a stylized, looping flourish extending to the right.

Dung C. Dinh  
Primary Examiner